RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: $\frac{10500,941}{pct}$ Date Processed by STIC: $\frac{9-6-05}{}$

ENTERED



PCT

RAW SEQUENCE LISTING DATE: 09/06/2005
PATENT APPLICATION: US/10/500,941 TIME: 11:22:22

Input Set : A:\13425-102US1.TXT

4 <110> APPLICANT: Climent-Johansson, Isabel

```
Enerback, Sven
7 <120> TITLE OF INVENTION: PROTEIN COMPLEXES
9 <130> FILE REFERENCE: 13425-102US1
11 <140> CURRENT APPLICATION NUMBER: US 10/500,941
12 <141> CURRENT FILING DATE: 2004-07-08
14 <150> PRIOR APPLICATION NUMBER: PCT/SE03/00139
15 <151> PRIOR FILING DATE: 2003-01-28
17 <150> PRIOR APPLICATION NUMBER: US 60/377,349
18 <151> PRIOR FILING DATE: 2002-04-30
20 <150> PRIOR APPLICATION NUMBER: SE 0200265-7
21 <151> PRIOR FILING DATE: 2002-01-29
23 <160> NUMBER OF SEQ ID NOS: 12
25 <170> SOFTWARE: FastSEQ for Windows Version 4.0
27 <210> SEO ID NO: 1
28 <211> LENGTH: 501
29 <212> TYPE: PRT
30 <213> ORGANISM: Homo sapiens
32 <400> SEQUENCE: 1
33 Met Gln Ala Arg Tyr Ser Val Ser Asp Pro Asn Ala Leu Gly Val Val
                   5
35 Pro Tyr Leu Ser Glu Gln Asn Tyr Tyr Arg Ala Ala Gly Ser Tyr Gly
                                   25
37 Gly Met Ala Ser Pro Met Gly Val Tyr Ser Gly His Pro Glu Gln Tyr
39 Ser Ala Gly Met Gly Arg Ser Tyr Ala Pro Tyr His His Gln Pro
41 Ala Ala Pro Lys Asp Leu Val Lys Pro Pro Tyr Ser Tyr Ile Ala Leu
                                           75
43 Ile Thr Met Ala Ile Gln Asn Ala Pro Glu Lys Lys Ile Thr Leu Asn
                                       90
45 Gly Ile Tyr Gln Phe Ile Met Asp Arg Phe Pro Phe Tyr Arg Glu Asn
               100
                                   105
47 Lys Gln Gly Trp Gln Asn Ser Ile Arg His Asn Leu Ser Leu Asn Glu
          115
                               120
49 Cys Phe Val Lys Val Pro Arg Asp Asp Lys Lys Pro Gly Lys Gly Ser
      130
                          135
                                               140
51 Tyr Trp Thr Leu Asp Pro Asp Ser Tyr Asn Met Phe Glu Asn Gly Ser
                      150
53 Phe Leu Arg Arg Arg Arg Phe Lys Lys Asp Val Ser Lys Glu
                  165
                                       170
55 Lys Glu Glu Arg Ala His Leu Lys Glu Pro Pro Pro Ala Ala Ser Lys
              180
                                   185
```

Input Set : A:\13425-102US1.TXT

```
57 Gly Ala Pro Ala Thr Pro His Leu Ala Asp Ala Pro Lys Glu Ala Glu
         195
                             200
59 Lys Val Val Ile Lys Ser Glu Ala Ala Ser Pro Ala Leu Pro Val
               215
61 Ile Thr Lys Val Glu Thr Leu Ser Pro Glu Ser Ala Leu Gln Gly Ser
                      230
                                         235
63 Pro Arg Ser Ala Ala Ser Thr Pro Ala Gly Ser Pro Asp Gly Ser Leu
                  245
                                      250
65 Pro Glu His His Ala Ala Ala Pro Asn Gly Leu Pro Gly Phe Ser Val
              260
                                 265
67 Glu Asn Ile Met Thr Leu Arg Thr Ser Pro Pro Gly Gly Glu Leu Ser
                             280
69 Pro Gly Ala Gly Arg Ala Gly Leu Val Val Pro Pro Leu Ala Leu Pro
                          295
71 Tyr Ala Ala Pro Pro Ala Ala Tyr Gly Gln Pro Cys Ala Gln Gly
                     310
                                         315
73 Leu Glu Ala Gly Ala Ala Gly Gly Tyr Gln Cys Ser Met Arg Ala Met
                  325
                                     330
75 Ser Leu Tyr Thr Gly Ala Glu Arg Pro Ala His Met Cys Val Pro Pro
              340
                                 345
77 Ala Leu Asp Glu Ala Leu Ser Asp His Pro Ser Gly Pro Thr Ser Pro
                              360
79 Leu Ser Ala Leu Asn Leu Ala Ala Gly Gln Glu Gly Ala Leu Ala Ala
                          375
                                              380
81 Thr Gly His His Gln His His Gly His His Pro Gln Ala Pro
                     390
                                         395
83 Pro Pro Pro Pro Ala Pro Gln Pro Gln Pro Thr Pro Gln Pro Gly Ala
                 405
                                     410
85 Ala Ala Ala Gln Ala Ala Ser Trp Tyr Leu Asn His Ser Gly Asp Leu
             420
                                 425
87 Asn His Leu Pro Gly His Thr Phe Ala Ala Gln Gln Gln Thr Phe Pro
88 435
                              440
89 Asn Val Arg Glu Met Phe Asn Ser His Arg Leu Gly Ile Glu Asn Ser
91 Thr Leu Gly Glu Ser Gln Val Ser Gly Asn Ala Ser Cys Gln Leu Pro
                      470
93 Tyr Arg Ser Thr Pro Pro Leu Tyr Arg His Ala Ala Pro Tyr Ser Tyr
                  485
95 Asp Cys Thr Lys Tyr
             500
98 <210> SEQ ID NO: 2
99 <211> LENGTH: 514
100 <212> TYPE: PRT
101 <213> ORGANISM: Homo sapiens
103 <400> SEQUENCE: 2
104 Pro Ser Glu Lys Asn Glu Phe Ser Arg Arg Lys Arg Ser Lys Ser Glu
       5
106 Asp Met Asp Asn Val Gln Ser Lys Arg Arg Tyr Met Glu Glu Glu
                                   25
```

Input Set : A:\13425-102US1.TXT

108 109	Tyr	Glu	Ala 35	Glu	Phe	Gln	Val	Lys 40	Ile	Thr	Ala	Lys	Gly 45	Asp	Ile	Asn
	Gln	Lys		Gln	Lys	Val	Ile		Trp	Leu	Leu	Glu	Glu	Lys	Leu	Cys
111		50			-		55	•	•			60		•		-
112	Ala	Leu	Gln	Cys	Ala	Val	Phe	Asp	Lys	Thr	Leu	Ala	Glu	Leu	Lys	Thr
113						70					75					80
114	Arg	Val	Glu	Lys	Ile	Glu	Cys	Asn	Lys	Arg	His	Lys	Thr	Val	Leu	Thr
115					85					90					95	
116	Glu	Leu	Gln	Ala	Lys	Ile	Ala	Arg		Thr	Lys	Arg	Phe		Ala	Ala
117	_		_	100	_	_	_		105	•••	5	.		110	D	**- 7
	Lys	Glu		Leu	ьуѕ	ьуs	Arg		GIU	HIS	Pro	Pro		Pro	Pro	vai
119	C02	Dro	115	Lys	Thr	17a]	7 cn	120	172 l	λen	Car	Λen	125	Δen	Mot	Sor
121	ser	130	GIY	цуь	TIII	val	135	дал	vaı	POII	SCI	140	ASII	ASII	Mec	DCI
	Tvr		Asn	Ala	Glv	Thr		Ara	Gln	Met	Leu		Ser	Lvs	Ara	Asn
123	_	5			1	150		5			155					160
		Ser	Glu	Ser	Ala	Pro	Pro	Ser	Phe	Gln	Thr	Pro	Val	Asn	Thr	Val
125					165					170					175	
126	Ser	Ser	Thr	Asn	Leu	Val	Thr	Pro	Pro	Ala	Val	Val	Ser	Ser	Gln	Pro
127				180		_	_		185					190	_	_
	Lys	Leu		Thr	Pro	Val	Thr		Gly	Ser	Leu	Thr		Thr	Ser	Val
129	.	D	195	D	3	m1	77-	200	77-7	777	71 -	mb	205	~1 ~	**-1	Dro
	ьeu		Ата	Pro	Asn	Thr	215	THE	vai	vai	Ата	220	THE	GIII	Val	PIO
131	Ser	210 Gly	Δen	Pro	Gln	Pro		Tle	Ser	Len	Gln		Len	Pro	Val	Tle
	225	Gry	Pott	110	GIII	230	1111	110	JCI	пси	235	110	шеш	110	Vul	240
		His	Val	Pro	Val		Val	Ser	Ser	Gln		Gln	Leu	Leu	Gln	Ser
135					245					250					255	
136	His	Pro	Gly	Thr	Leu	Val	Thr	Asn	Gln	Pro	Ser	Gly	Asn	Val	Glu	Phe
137				260					265					270		
	Ile	Ser		Gln	Ser	Pro	Pro		Val	Ser	Gly	Leu		Lys	Asn	Pro
139	7	_	275			.	D	280	D	m1	.	D	285	3	17-7	Desc
	val		Leu	Pro	ser	Leu	295	Asn	Pro	Tnr	гаг	300	Asn	ASI	vai	Pro
141	Sar	290	Dro	Ser	Pro	Ser		Gln	Δrα	Δen	Pro		Δla	Ser	Δla	Δla
	305	vai	FIO	SCI	110	310	116	GIII	Ar 9	ADII	315	1111	nια	UCI	niu	320
		Leu	Glv	Thr	Thr		Ala	Val	Gln	Ala		Pro	Thr	Ala	His	
145			1		325					330					335	
146	Ile	Val	Gln	Ala	Thr	Arg	Thr	Ser	Leu	Pro	Thr	Val	Gly	Pro	Ser	Gly
147				340					345					350		
148	Leu	Tyr	Ser	Pro	Ser	Thr	Asn	-	Gly	Pro	Ile	Gln		Lys	Ile	Pro
149			355					360		_	_		365			
	Ile		Ala	Phe	Ser	Thr		Ser	Ala	Ala	Glu		Asn	Ser	Asn	Thr
151	m1	370	7	T7 -	61.	7. ~~~	375	mb	B	7	mb	380	7 ~~	71-	C.~	7727
		Pro	arg	Ile	GIU		GIN	inr	ASN	гаг	395	тте	Asp	ATG	ser	vai 400
	385 Ser	Tare	Larg	Ala	Δlo	390	Ser	Thr	Ser	Gln		Glv	Lare	Δla	Thr	
155	DET	пур	пур	AIG	405	rop	JEL	T 1 1 T	JEI	410	Cys	C-Y	~15		415	1
	Ser	Asp	Ser	Ser		Val	Ile	Asp	Leu		Met	Asp	Asp	Glu		Ser
								- 1				_	-	_		

Input Set : A:\13425-102US1.TXT

157		_		420					425					430		_
158	Gly	Ala	Ser	Gln	Asp	Pro	Lys	_	Leu	Asn	His	Thr	Pro	Val	Ser	Thr
159			435					440					445			
160	Met	Ser	Ser	Ser	Gln	Pro	Val	Ser	Arg	Pro	Leu	Gln	Pro	Ile	Gln	Pro
161		450					455		_			460				
162	Ala	Pro	Pro	Leu	Gln	Pro	Ser	Glv	Val	Pro	Thr	Ser	Glv	Pro	Ser	Gln
	465					470		- 1			475		U-1			480
		Thr	т1.	шіс	T 011	Leu	Dro	Thr	777	Dro		Th.	17 n 1	7 an	W-1	
	1111	IIIL	TIE	птъ		цец	PLO	TIIL	Ala		1111	1111	vai	ASII		1111
165	•	_	_		485	~-3		_,	_,	490	_	_		_	495	
	His	Arg	Pro		Thr	Gln	Val	Thr		Arg	Leu	Pro	Val		Arg	Ala
167				500					505					510		
168	Pro Ala															
171	<210	<210> SEQ ID NO: 3														
172	<21	<211> LENGTH: 524														
173	<212	<212> TYPE: PRT														
	<213> ORGANISM: Homo sapiens															
	<400> SEQUENCE: 3															
						Glaz	Dro	λαn	Glar	Clu	Gln.	т1.	7~~	Larc	Wic	Λla
		птр	val	GIU		Gly	FIO	Well	GIA		GTII	тте	Arg	пуs		AT a
178		~ 7		•	5					10	~3	_	_		15	
	GIY	GIN	гуѕ		Thr	Tyr	ьуѕ	Ата		ser	Glu	Ser	Tyr		Pne	ьeu
180				20					25					30		
181	Pro	Arg	Glu	Ala	Val	Thr	Arg	Phe	Leu	Met	Ser	Cys	Ser	Glu	Cys	Gln
182			35					40					45			
183	Lys	Arg	Met	His	Leu	Asn	Pro	Asp	Gly	Thr	Asp	His	Lys	Asp	Asn	Gly
184		50					55				_	60				
185	Lvs	Pro	Pro	Thr	Leu	Val	Thr	Ser	Met	Ile	Asp	Tvr	Asn	Met	Pro	Ile
186	_					70				_	75	-				80
		Met	Δla	Tyr	Met	Lys	Hic	Met	Lvs	T.e.ii	-	T.e.ii	T.e.11	Δen	Ser	
188	1111	Mec	AΙα	- 7 -	85	шуз	1115	Mec	цуз	90	GIII	Бец	Бец	no	95	GIII
	~1 m	7. ~~~	C1	7 ~~		Com	C	T1.	~1		7 ~~	a 1	Dha	7 ~~		Com
	GIN	Asp	GIU		GIU	Ser	ser	тте		ser	Asp	GIU	Pne		Met	ser
190	_	_		100		_		-	105			_	_	110	_	
	-	Ser		Arg	Met	Ser	Ala		Asn	Ser	Asp	Leu		Ser	Asn	Leu
192			115					120					125			
193	Glu	Glu	Arg	Met	Gln	Ser	Pro	Gln	Asn	Leu	His	Gly	Gln	Gln	Asp	Asp
194		130					135					140				
195	Asp	Ser	Ala	Ala	Glu	Ser	Phe	Asn	Gly	Asn	Glu	Thr	Leu	Gly	His	Ser
	145					150			-		155			-		160
		Ile	Ala	Ser	Glv	Gly	Thr	His	Ser	Ara		Met	Glv	Asp	Ser	
198					165	1				170			1		175	
	Ser	Ver	G1 17	Lare		Gly	Leu	G111	Gln		رد <u>ای</u>	Gl n	Dro	Leu		T.e.u
	DCT	roh	GIY		TILL	GTÅ	neu	GIU		voħ	GIU	GTII	-10		voii	L EU
200	•		•	180	-	^		a 3	185	m1	_	~ 3		190	T 7	3
	ser	Asp		Pro	Leu	Ser	Ala		Leu	Thr	ser	GIU	-	Arg	тте	Asp
202			195					200					205		_	
203	Asp	His	Asn	Ser	Asn	Gly	Lys	Asn	Lys	Tyr	Lys	Asn	Leu	Leu	Ile	Ser
204		210					215					220				
205	Asp	Leu	Lys	Met	Glu	Arg	Glu	Ala	Arg	Glu	Asn	Gly	Ser	Lys	Ser	Pro
	225		-			230					235	•		-		240
		His	Ser	Tvr	Ser	Ser	Tvr	Asp	Ser	Glv		Asn	G] 11	Ser	Val	
208				-1-	245	JUL	- y -	Tab.	DC1	250	y 3	11011	UI U	JUL	255	-101
200					243					230					233	

Input Set : A:\13425-102US1.TXT

209 210	Arg	Gly	Ala	Glu 260	Asp	Leu	Ser	Leu	Asn 265	Arg	Gly	Asp	Glu	Asp 270	Glu	Asp
	λcn	uic	Glu.		uic	7 cn	Asp	Car		Tarc	1721	λαn	Clu		λαν	Clv
212	тэр	піз	275	ASP	nis	Asp	мър	280	Giu	пуъ	vai	ASII	285	1111	Asp	GIY
213 214	Val	Glu 290	Ala	Glu	Arg	Leu	Lys 295	Ala	Phe	Asn	Met	Phe 300	Val	Arg	Leu	Phe
	17-1	-	C1.,	7 02	T 011	7 00		Mot	7727	Dro	т1.		T ***	Cl n	D×o	Tara
	305	Аър	GIU.	ASII	пеп	310	Arg	Met	vaı	PIO	315	ser	цуъ	GIII	PIO	320
217	Glu	Lys	Ile	Gln	Ala	Ile	Ile	Asp	Ser	Cys	Arg	Arg	Gln	Phe	Pro	Glu
218					325					330					335	
219	Tyr	${\tt Gln}$	Glu	Arg	Ala	Arg	Lys	Arg	Ile	Arg	Thr	Tyr	Leu	Lys	Ser	Cys
220				340					345					350		
221	Arg	Arg	Met	Lys	Arg	Ser	Gly	Phe	Glu	Met	Ser	Arg	Pro	Ile	Pro	Ser
222			355					360					365			
223	His	Leu	Thr	Ser	Ala	Val	Ala	Glu	Ser	Ile	Leu	Ala	Ser	Ala	Cys	Glu
224		370					375					380				
225	Ser	Glu	Ser	Arg	Asn	Ala	Ala	Lys	Arg	Met	Arg	Leu	Glu	Arg	Gln	Gln
226	385					390					395					400
227	Asp	Glu	Ser	Ala	Pro	Ala	Asp	Lys	Gln	Cys	Lys	Pro	Glu	Ala	Thr	Gln
228					405					410					415	
229	Ala	Thr	Tyr	Ser	Thr	Ser	Ala	Val	Pro	Gly	Ser	Gln	Asp	Val	Leu	Tyr
230				420					425					430		
231	Ile	Asn	Gly	Asn	Gly	Thr	Tyr	Ser	Tyr	His	Ser	Tyr	Arg	Gly	Leu	Gly
232			435					440					445			
233	Gly	Gly	Leu	Leu	Asn	Leu	Asn	Asp	Ala	Ser	Ser	Ser	Gly	Pro	Thr	Asp
234		450					455					460				
235	Leu	Ser	Met	Lys	Arg	Gln	Leu	Ala	Thr	Ser	Ser	Gly	Ser	Ser	Ser	Ser
236	465					470					475					480
237	Ser	Asn	Ser	Arg	Pro	Gln	Leu	Ser	Pro	Thr	Glu	Ile	Asn	Ala	Val	Arg
238					485					490					495	
239	Gln	Leu	Val	Ala	Gly	Tyr	Arg	Glu	Ser	Ala	Ala	Phe	Leu	Leu	Arg	Ser
240				500					505					510		
241	Ala	Asp	Glu	Leu	Glu	Asn	Leu	Ile	Leu	Gln	Gln	Asn				
242			515					520								
244	<210)> SI	EQ II	ON C	: 4											
245	<211	l> LE	ENGT	I: 58	36											
246	<212	2> Ţ?	PE:	PRT												
247	<213	3> OF	RGAN	SM:	Homo sapiens											
	<400		~													
250	Met	Asn	Pro	Thr	Asn	Thr	Val	Phe	Asp	Ala	Lys	Arg	Leu	Ile	Gly	Arg
251	1				5					10					15	
252	Arg	Phe	Asp	Asp	Ala	Val	Val	Gln	Ser	Asp	Met	Lys	His	Trp	Pro	Phe
253				20					25					30		
254	Met	Val	Val	Asn	Asp	Ala	Gly	Arg	Pro	Lys	Val	Gln	Val	Glu	Tyr	Lys
255			35					40					45			
256	Gly	Glu	Thr	Lys	Ser	Phe	Tyr	${\tt Pro}$	Glu	Glu	Val	Ser	Ser	Met	Val	Leu
257		50					55					60				
258	Thr	Lys	Met	Lys	Glu	Ile	Ala	Glu	Ala	Tyr	Leu	Gly	Lys	Thr	Val	Thr
259	65					70					75					80

VERIFICATION SUMMARY

DATE: 09/06/2005

PATENT APPLICATION: US/10/500,941

TIME: 11:22:23

Input Set : A:\13425-102US1.TXT
Output Set: N:\CRF4\09062005\J500941.raw